# What the Hack?

The Persona of the Hacker in *Watch Dogs*, *Watch Dogs 2*, and *Mr. Robot*.



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Leiden University

Author: Sandra Meddeler

Supervisor: Dr. Y. Horsman

#### Sandra Meddeler

#### s1140744

Dr. Y. Horsman

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Last year on the 26<sup>th</sup> of November, the San Francisco Municipal Railway was hacked. The text displayed throughout the stations was "You Hacked, ALL Data Encrypted. Contact For Key(cryptom27@yandex.com)ID:681 ,Enter". Passengers were able to get free rides on the public transportation. At first, the motivation, or demand, of the hacker group was not yet known, so the public saw this action as an action for the people. But the nature of the hack was revealed later. What the public interpreted as a political hack, which granted them free passage, turned out to be something of a different nature. This hack was not an action for the people, since the Russian hacker group demanded 100 BitCoin<sup>1</sup>. So, the hack seemed to have a more monetary aim rather than a political one, seemingly making the nature of the hack a criminal one.

The response of the public appeared to be linked to the release of a video game. This video game was launched shortly before the hack, and is called *Watch Dogs 2. Watch Dogs 2* is set in San Francisco, which probably resulted in people linking the real life hack to the video game. In *Watch Dogs 2*, the main character hacks for the public, trying to protect them and their privacy from big corporations. In *Watch Dogs 2*, the main character attempts to give back control to the public by mainly attacking the codes of Noodle, a company that resembles Google, and/or Facebook. This is in line with the real life hack, where the public acquired free 1Lee, Dave. "Hackers hit San Francisco transport systems", *BBC News*, 28 Nov. 2016, http://www.bbc.com/news/technology-38127096

transport. The public was released from paying the big corporation that organizes and manages the metro system. If the hacker is capable of opposing these big cooperations, what position does this give the hacker in our society? Is he a vigilante, trying to get the best result for the people? Or is he a criminal, trying to resist the power of the cooperations?

Foucault argues that there is a Society of Discipline, which is a society based on controlling the human body through discipline, and creates docile bodies through this process (Foucault 137-8). Deleuze took that philosophy in a different direction, and pointed out that nowadays we are part of a Society of Control. This Society of Control does not focus on the human body anymore, but works through dividuals, which is a concept that will be explained in the first chapter. However, Deleuze's theory seems to be missing something that Foucault did mention in every version of society that he gave. Foucault implied that there is always a resistance when it comes to the power that wishes to dominate (Foucault 1-334). Deleuze does not give an example of resistance in his short essay on the Society of Control, which offers the question: what is the resistance in the Society of Control? What form does this resistance have? Could the hacker possibly be the resistance in the Society of Control? This society will be explained in the first chapter, along with manifests of hackers to create a framework from which the hacker can be analyzed. To see if the hacker is either a figure of resistance, or has a different function in the Society of Control.

This thesis will use the following case studies; the video games *Watch Dog, Watch Dogs 2*, and the television-series *Mr. Robot*. All these case studies reflect on the character of the hacker, and his actions within society, but the nature of the actions of the hacker is different. Within these three case studies, there are three types of hackers, and two types of media. These two types of media, the television series and video game, are different by nature. Both are visual media, but the video game offers the player some kind of control by letting the

player make decisions while playing the hacker in *Watch Dogs* and *Watch Dogs 2*, whereas the television series has a more passive spectator that has no control over the character. Considering that control is an important theme, this difference between these two media is something that should be kept in mind when examining these three case studies.

I will compare these case studies to three types of hackers, two types will be discussed in the theoretical framework. The first hacker type is Wark, who wrote the *Hacker Manifest*, the second is the Invisible Committee, a French hacker group, and third is the group Anonymous, who recently wrote a manifest, which does not give a clear goal of the hackers, but they are well-known (at least by the younger generation) and are referred to in the case studies. This thesis will sketch an image of the persona of the hacker in the popular culture, which is popping up more and more, and answer the following question: what is the function of the hacker in *Watch Dogs, Watch Dogs 2*, and *Mr. Robot*?

# 1. Disciplinary Society, and the Society of Control

In 1980, Deleuze published an essay that responded to Foucault's disciplinary society, and he noted that we have moved past this society. Deleuze argued that after WWII the society changed into a society of control, and that we were past a disciplinary society (3). Deleuze took the ideas of Foucault and his disciplinary society, and recognized a shift of change in the current society. Instead of a power disciplining humans into docile bodies, there was a shift in the power itself, moving from one central point of power to a rhizome of power nodes, and the individuals are no longer made recognized as normal individuals and reduced to database constructs. Before answering what Deleuze's society of control is, I will explain what Foucault's disciplinary society is. Foucault's disciplinary society is a society where power is not only something negative and oppressive, it is something that is productive. The disciplinary society controls the human, its actions, and organizes the space, time, and actions surrounding the human to make these humans into docile bodies that are manageable. This society creates docile bodies through discipline, which is obtained by forces. These forces are not only spatial, but also temporal. The bodies are disciplined in specific spaces, which are institutes, such as prisons, schools and the army. Within these institutes there are multiple places where these forces are present. One of them is the space around the subject, this force is called "the art of distributions", and is linked to the space in which the individual is present (Foucault 141). Discipline appears through the art of distributions whenever an individual is enclosed in a series of heterogeneous spaces by itself, this way the inconveniences that might interrupt work, or cause a disturbance otherwise, are neutralized, and production becomes more concentrated (Foucault 141-2). Hence the name art of distribution, the space is made as efficient as possible, making the distribution equal and the most profitable. However, this enclosure is not constant, and is divided in many sections to organize the individual and

locate them (Foucault 143). A simple example is the house: you have a dining room, living room, bedroom, they all have their own section, but are part of a bigger whole. People move within these spaces, not being enclosed by one space their whole life, or day, but moving between sections. Every space has its function, but this function is not static, since it is also attached to rank according to a network of relations, and organizes the individuals according to that rank in the space (Foucault 145-6). Another example is the factory, the factory is a place of work, but also has a clear ranking order. The workers listen to their superiors, who will tell them what to do and how to do it. These superiors have another superior above them, telling them what to do. A third example might be the home, the parents have a higher rank than the children, so the children must listen to the parents.

Another force is what Foucault calls "the control of activity", and this is present in the time of the human (149). This force works with timetables, trying to make the time used as useful as possible, making sure that the act is broken down into elements and ordered in the most productive order (149-52). Like the earlier *art of distribution*, efficiency is the goal, but instead of organizing the space, this time the time is organized in such a fashion that the human uses their time as efficiently as possible. This force causes discipline, because it creates the best relation between the body and the use of time for each action, making it as efficient as possible, but it also defines what relationship the body should have with the object it is manipulating (Foucault 152-3)..

In his response to Foucault, Deleuze proposes that in the period post WWII we have entered a new type of society: a society of control. In the society of control there are new forces, which are replacing the disciplinary societies, "forming a system of variable geometry the language of which is *numerical*" (Deleuze 4). This shift, from the disciplinary society to the society of control, can be seen as a shift from controlling the visible space to managing

information, and controlling is no longer something to confine the humans, but tracking humans and collecting information about them (Bogard 19). The focus is no longer making humans into efficient docile bodies that produce, but the control over the information that the humans produce. Rather than it being a discipline that comes from within, because the human is feeling watched, coercing the human to refrain from doing anything wrong, it is something outside of the human. Deleuze summarizes the difference between disciplinary and control society as a transition from watchwords to pass words.

In the societies of control ... what is important is no longer either a signature or a number, but a code: the code is a password, while on the other hand the disciplinary societies are regulated by watchwords (Deleuze 5).

Watchwords are linked to the old regime surveillance. They suggest that our actions and communications are being watched, and that power is exercised through surveillance. The fact that those watchwords can lead to punishment is something the human in the society of discipline is aware of, and henceforth people change their behavior, and internalize the disciplinary gaze to which they are subjected. The societies of control do not work with watchwords, but with passwords and the computer (*Protocol* 86). Instead of watching humans by looking at the words they use, humans try protect their information with passwords, just as corporations try to keep control by using the right passwords to maintain control over certain information.

In contrast to the disciplinary society, the focus of the society of control is information, not the humans creating the information. The society of control is a society that does not seek to produce normal individuals and docile bodies, Deleuze claims we have become "dividuals";

we are a collection of different kinds of data (Deleuze 5). Bogard explains that dividuals are database constructions, which derive from "rich, highly textured information on ranges of individuals that can be recombined in endless ways for whatever purposes" (Bogard 22). Humans no longer have to be made into docile bodies, they just have to be registered as information, as an entry in a database, expanding the information with every decision they make. Instead of working in a physical factory where people where disciplined and structured in rank, these factories have been replaced by corporations, which are "a spirit, a gas", not something fixed or solid" (Deleuze 4-6). Like the dividual, it is no longer something you can easily pinpoint, it's form is more abstract than before. Unlike the defined spaces and watchwords of the disciplinary society, the society of control seems to be working with more abstract notions of spaces, humans and corporations.

In this shift, dividuals are registered as information, and factories have been replaced by corporations. Bogard argues that the corporation that Deleuze is talking about is a distributed network (Bogard 21). According to Galloway, distributed networks produce "new, robust structures for organization and control", and while this organization might be different than a pyramidal system of power, it still keeps things under control ("Protocol" 318). This is present in the society of control, even if the humans still works in a pyramidal system with a boss above them and so on, but the ways of controlling the dividuals is not based on this hierarchical system of power. It is based on the idea of controlling the data of the dividual, not the dividual's position in this pyramidal system of power as in the society of discipline. Alexander Galloway responds to Deleuze's idea of the dividual and this pyramidal system of power by remarking that distributed networks organize and control by using the technology of the protocol, and this protocol does not rely on hierarchical, pyramidal or centralized mechanisms ("Protocol" 317). But what mechanism does the protocol in the distributed network work with, if it is not a hierarchical, pyramidal or centralized mechanism? Galloway argues in his book *Protocol* that the diagram (a term he borrows from Deleuze) is the distributed network, which is a structural form without a center that reminds or resembles a web or meshwork (*Protocol* 3). Deleuze has a preference for the rhizome to the tree, which basically means that he prefers a horizontal network that can keep expanding and does not have an end point, unlike the tree that stops growing at some point. This ties in with the distributed network, which works like a rhizome, in which "each node in a distributed network may establish direct communication with another node without having to appeal to a hierarchical intermediary" (*Protocol* 11-12). The mechanism that the distributed network works with is a horizontal one, divided in nodes. One of the most popular and existing distributed networks is the Internet, which, like a distributed network, does not work with a chain of command: it works with autonomous agents who work with the pre-agreed rules, or what Galloway calls "scientific rules of the system", and these rules are the common language spoken by the computer called protocol (*Protocol* 38-39).

What does protocol mean exactly? Protocols organize the relationship between humans and the computers they interact with. In the society of control the distributed network works with protocols, which organize and structure relationships between the dividuals and the computers. Galloway calls protocols "systems of material organization": these protocols structure the relationships of the things, such as the information of the dividuals in the distributed network, but also how these things float in the distributed network in which they are embedded ("Protocol" 319). Protocol is a code, the technology that organizes and operates control in the distributed network, it sets a technical standard rule, or recommendation, to implement ("Protocol" 317-19). This technical standard is the same as the above mentioned *scientific rules of the system*, by these rules the protocol organizes, and establishes how things

should flow in the distributed network. The distributed network works in layers, structured and organized by protocol. The human interacts with an interface of a computer which is the application layer which is also organized by protocol, and through the protocol behind this interface the interaction and the place of the human and computer in the distributed network are organized and controlled (*Protocol* 40). This application layer is only one of the layers, but the function of the protocol is the same in every layer, structuring, organizing and making it work within the rules. The same goes for the corporation, which interacts with the data of the dividual through protocol.

In this society of control with its networks, protocols and computers, what is resistance? The shared question of Deleuze and Galloway is what kind of resistance there is in the society of control. In Foucault's societies each form of power has its own resistance, in the disciplinary society subjects can respond by claiming their identity. If an individual identifies as a feminist, they will be able to speak up and claim their position as a feminist. But how does this work in a society where the basis is dividualising? The dividual does not have one power to respond to, it is a network with different nodes of distributed power, and mostly the dividual does not have the knowledge of the network and nodes to tactfully respond to this power. The dividual is registered as a database construct, so how can a dividual resist this? There is one problem when it comes to protocol and resistance, and thus resistance and the society of control. As Galloway states: "opposing protocol is like opposing gravity- there is nothing that says it can't be done, but such pursuit is surely misguided and in the end hasn't hurt gravity much" (Protocol 147). He argues that protocol appears to us as more a law of nature, rather than a law of society. Protocol decides who can connect to what, and so the participants can connect. There can be no real resistance against protocol, because protocol decides what can happen based on the rules it knows. So working against protocol is very

difficult, as Galloway noted by comparing it by Gravity, going along with protocol feels more natural and is less difficult. But what does this mean for resistance in the society of control? Does it not exist? Galloway argues that resistance has changed within the protocological age, and that the enemies of networks might actually be other networks (*Protocol* 150). This is where the hacker appears. The hacker stands for a different kind of resistance.

By knowing protocol better than anyone else, hackers push protocol into a state of hypertrophy, hoping to come out the other side. So in a sense, hackers are created by protocol, but in another, hackers are protocological actors par excellence (Protocol 158).

The hacker embodies a new kind of resistance that works with the protocol, using the possibilities of the protocol rather than resisting the protocol. "Hackers know code better than anyone. They speak the language of computers as one does a mother tongue" (*Protocol* 164). By knowing code, the hacker is capable of bending protocol his way. He understands how protocol works, and thus sees possibilities within the protocol. The hacker makes use certain "exploits" that they find and find their way into the network by protocol (*Protocol* 167). Unlike earlier resistances, the hackers uses the system of power to oppose the power. One of their options is to expose information, such as showing the public that their information is not safe with companies by dumping information on the Internet. But according to Galloway, "the moment of disconnectivity is the moment when protocol most forcefully displays its political character" (*Protocol* xvi). Usually the hackers are not on the web, not in the network, i.e. they are disconnected. Resisting connection, and being connected, seems to be political actions by the hackers and their act of defiance.

When talking about resistance in the society of control, it appears that the hacker could fill this role. The hacker works with the protocol, because resisting protocol is impossible, this is the only possibility to somehow resist the power in the society of control. The hacker can expose the information that the system is hiding and gathering of the dividuals in the society. By using protocol, they bend the system to their own will. But hackers are not necessarily solo artists. Galloway notes that hackers can also be seen as autonomous agents working in small groups to attack specific problems (*Protocol* 159). The specific problem could be the power having too much control, so that the hacker group will have to deal with this problem by using protocol. When it comes to resisting the power in the society of control, it appears that the hacker is the most equipped to do so.

# Hacker Types

The hacker is a figure that has gotten a lot of attention, in journalism, politics, but also in popular culture. The hackers of Anonymous exposed information about ISIS twitter accounts, and this was shown on the news. In popular culture, hackers have been becoming a more prominent figure. There are video games with hackers as protagonists, television series about hackers, with the hacker being the protagonist, or antagonist. Not only Galloway has written about the hacker, and the hacker has more than one way to be political, not only by disconnecting as Galloway's idea of the hacker does. One of the other ways is described by Andrew Schrock, who describes the act of civic hacking. Schrock notes that "hackers are not simply computer super-users", and that the term is not yet clearly defined (582-83). He argues that there are *civic hackers*, who are hackers which try to ease societal suffering by exposing information of how abstract systems work and they try to improve how these systems work to make the societal suffering less (Schrock 594). Schrock quotes Lievrouw when he explains what civic hacking is, which is broadly described as alternative or activist media that challenges or alters the dominant force, or usual ways of doing society, culture, and politics, by using the communication artifacts, practices, and even the social arrangements of new information and the technologies we use to communicate (Lievrouw qtd. In Schrock 582). This hacker does not disconnect to act political, they present messages in different kind of technologies, such as the Internet or television, to challenge the ideas of the mainstream media. In this way, they try to connect with other humans, instead of disconnecting. When the Internet was still new, hackers were exploring it, but when computer networks were being recognized as property, they were trespassing, and the opinion on hackers changed. "A 'moral panic' ensued, in which the hacker appeared as a new kind of folk devil, recklessly invading networks, interrupting essential services, stealing state secrets or credit card numbers" ("Hacker" 321). This negative image of the hacker is another way of perceiving the hacker. The hacker figure appears to be a complex figure that has many types of actions and goals. So what does it mean to be a hacker, and how can we understand this figure? Before I will analyze two video games and a television series, I will examine three other views on the hacker, these views discuss the hacker as a political figure and the position of the hacker.

There does not seem to be one precise definition for the term of hacker; there are multiple varieties of the hacker. For that reason, I will use three types of the hacker in this thesis. One type will be based on the *Hacker Manifesto* by Mckenzie Wark, which seems to have a Utopian point of view. The second type will be based on a text of the *Invisible Committee* from France. The third type is based on the hacker group Anonymous, who recently uploaded a manifesto on line, but there is no clear political goal in this manifesto, so the emphasis on this hacker type will mainly be the way Anonymous view themselves.

What does it mean to be a hacker for Mckenzie Wark? In Wark's manifest, he creates a clear opposition between two parties, the hacker and the vectoralist. This opposition makes it easier to place the hacker into the society of control, since there is a clear power and resistance structure. According to this manifest, the hacker has its own class, and they are standing up to the vectoralist class. "Unlike farmers and workers, hackers have not— vet — been dispossessed of their property right entirely, but still must sell their capacity for abstraction to a class that owns the means of production, the vectoralist class – the emergent ruling class of our time" (A Hacker Manifesto 7)<sup>2</sup>. While Deleuze indicates that these are anonymous forces, Wark applies the Marxist idea of class struggle. This vectoralist class could be seen as the dominant class in the societies of control of Deleuze, since these societies practice control through computers and the distributed network, and the vectoralist class seems to be using computers and the network to gain their power. The vectoralist class has power by monopolizing intellectual property, such as copyrights, and monopolizing the vectors of communication, which reproduce the value of the intellectual property (A Hacker Manifesto 12). The more the intellectual property is reproduced, the more valuable it is. The vectoralists do not only monopolize intellectual property, but also use this intellectual property to control and gain power over the dividuals that use and reproduce this property through the vectors of communication. The vectors of communication are the way and means by which information moves, such as television, telephone, the Internet (A Hacker Manifesto 135). The dividual creates information, the vectoralist tries to get a hold of this information and tries to control it and the way it moves. The dividual, that wants to use information that is copyrighted, has to pay to use this copyrighted material. By also owning the vectors of communication, the

2. Since this source did not have page numbers, page numbers were added. The first page of the first chapter "Abstraction" was chosen as page number one.

vectoralist class has power over how and in what form this information is used or transported through these vectors.

This is where the hacker comes in. "The hacker class arises out of the transformation of information into property, in the form of intellectual property" (A Hacker Manifesto 14). The moment the information that the dividual creates becomes intellectual property, is when the hacker class is formed, because the vectoralist class has power over the way it travels, and sometimes has the possibility to access it (such things as Facebook sharing your age, gender, location to advertisers). The complication with information is that the way it is produced is rather abstract, which makes the property form of information also rather abstract (A Hacker Manifesto 14). The hackers are caught between two groups, the masses and the ruling class from above. And bargain their position by hacking and so creating a different political class and opposition (A Hacker Manifesto 17). Unlike the masses, they know code and are capable of resisting, and unlike the ruling class, they do not wish to benefit from knowing code or owning information. According to Wark, this knowledge that the hacker has implies a few things: "a politics of free information", "free learning", "The gift of the result in a peer-to-peer network", and "an ethics of knowledge open to the desires of the productive classes and free from subordination to commodity production" (A Hacker Manifesto 29). This view seems Utopian, which is also something Galloway points out. "One of the most important signs of this utopian instinct is the hacking community's anti-commercial bent" (Protocol 169). Wark argues that the hacker is a figure that shows "the ideal kind of a labor that finds its own time, that sets its own goals, and that works on common property for the good of all" ("Hackers" 321). The hacker is free to decide what he wants to do, when he works, and what he wants to accomplish, rather than following a structured path.

Wark's hacker is a person that stands between the ruling class and the masses, and wants information to be free, just like the masses should be free. Politically speaking, McKenzie takes an anarchistic position, he believes that the masses should be able to organize themselves, and that they should not be told what to do at what time. The masses should be free to learn, and should not be repressed. This reminds of the idea of communism, to which Wark also refers in his manifest, but he notes that "the working class had desires, and as a result of these desires came the communists. But they made property a state monopoly and thus created a new ruling class, and a new and more brutal class struggle" (A Hacker Manifesto 9). His critique lies in the execution of the idea, not the idea itself, which emphasizes his anarchistic position. This is clear in the following phrase: "The time is past due when hackers must come together with workers and farmers-with all of the producers of the world-to liberate productive and inventive resources from the myth of scarcity" (A Hacker Manifesto 8). This reference to the myth of scarcity, and the farmers, point towards the idea that there is enough food being produced for the world's population, but the food is distributed in such a fashion that not everyone gets food, which in turn causes a humanitarian discussion (Thompson 161-62). Wark applies this idea on information, and knowledge. The hacker can start the liberation from the vectoralist class rule by removing the imposed scarcity on information and knowledge that the vectoralist class imposed on it (A Hacker Manifesto 58).

The second hacker type is based on the French Invisible Committee, a group of unknown authors who write essays with an anarchistic tone, who seem more focused on the government and the masses, and later on focus on the figure of the hacker. They start out with stating that in the era of networks the government has the focus of ensuring the interconnection between people, objects, and machines and the information generated by this

process should be freely available to anyone (Invisible Committee 2)<sup>3</sup>. They continue to describe the same process as disastrous, stating that "connection, networking, selforganization" are the terms that made movements such as Occupy protest, while also being the terms that describe applications such as Google Maps, and that these new communication technologies, such as Google Maps, are not only present, but also form the world we live in and that the networking variety of governing was starting to win (Invisible Committee 2). For them, this variety of governing is winning, because it is underground, invisible, and intertwining with "biology, artificial intelligence, management, or the cognitive sciences" and also covering the whole surface of the globe (Invisible Committee 2). The Invisible Committee's idea of the networking government seems to acknowledge the control society of Deleuze, where the societies of control use the network and computer to exercise their power and control. The government to which the Invisible Committee is referring uses the network as a tool to exercise their power and control. Another idea of the Invisible Committee is that the citizens are now *smart people*, who are "receivers, and generators of ideas, services, and solutions" (4). This fits with the idea of the dividual of Deleuze, where the human is reduced to the information it produces, but the Invisible Committee uses words that are more specific such as generator of ideas, which is a type of information humans produce. The Invisible Committee and Deleuze seem to refer to the same kind of human with a different term. But the problem with the citizens, or humans in the control society, is that they continue to see themselves in the old paradigm, before the cybernetic government operated through its network (Invisible Committee 4). The citizens have the idea that their data belongs to them like their other objects do, and that they exercise their "individual freedom" when they decide that Google etc can have access to their data, without the realization what the effect is on 3. Once again, there were no page numbers so these page numbers were added by me, starting from the first page with the title: FUCK OFF, GOOGLE.

those who do not share their information, who will be treated as suspects or possible deviants (Invisible Committee 4). Like Galloway argued, disconnectivity is the most political form of the protocol (*Protocol* xvi). In short, the people choosing to be disconnected are suspicious to those who control the network.

This is where the hacker appears. The hacker is a figure that is ahead of his time, being aware of the network and abstraction of information. He uses the Internet as a tool that is an extension of the physical reality, not something that is only present in the virtual world, especially since the hacker movement is going beyond the computer screen (Invisible Committee 5). The example the Invisible Committee gives are the attacks on banks and other multinationals conducted by Anonymous or LulzSec, which go beyond the cyberspace (Invisible Committee 6). The hacker has a different perspective, which means that they want to understand the devices around us, since this gives them power, and by understanding these devices they can shape the world around them, because they understand the structure of the world (Invisible Committee 7). They know the code of the network, and can therefore work with its protocols to work toward their own objectives. According to the Invisible Committee, the hackers have to work together to defeat the government, and release the fetish of doing what they want as individuals (8).

The third hacker type is based on Anonymous, the hacker group that usually appears with Guy Fawkes masks on videos and images. Recently, a member, or members, of Anonymous posted a manifesto on-line. They argue that everyone, and no one, is Anonymous. There is no single ideology, no leader, no organization. "Nobody can join Anonymous. Anonymous is not an organization" (Anonymous). The idea of Anonymous is to do what is right, to stand up against oppressive forces. In the manifesto, they discuss their most known feature, the Guy Fawkes mask. Even though it is what they are known for, they argue that not every Anonymous member cares for it. Like Wark, and The Invisible Committee, they have an anarchistic position, claiming that the only person you should follow is yourself, and that you know what is right. There is no common goal in Anonymous, the only consistant is that an Anonymous member follows their instincts, and does not accept oppression.

There are some clear similarities between the three texts. In the first and second text about hacker types, Wark and the Invisible Committee value free information for everyone, i.e. it should be circulating. In both cases, they stand between the masses and the power, with the desire of liberating the information made by the masses, and giving them authority over what they create. This liberation has to come through working with protocol, turning the system of the power against the ruling class by taking control of the network. Anonymous does not accept oppression, but they do not speak clearly about free information, it is a group with individuals with different perspectives and goals. Like Wark's hacker and the Invisible Committee, they are anarchistic by nature, calling people to stand up against oppression, and do what you think is right. There is no single true ideology, such as in Wark's manifesto, or the ideas of the Invisible Committee. Their identity and goals are more vague, less consistent. They call for action, but do not tell the individuals what actions to undertake. They are mainly marked by their Guy Fawkes masks, not an ideology. Wark's hacker type is a figure in a class struggle, while the Invisible Committee's hacker type is part of a movement that can defeat the government, at the same time, the Anonymous hacker type is more ambiguous, since they are not part of a movement or organization, they just resist oppression.

# 2. The Hacker in Video Games: Hacker or Cracker?

In the previous chapter, I discussed three hacker types, and how the hacker could be the new embodiment of resistance in the society of control. I used multiple texts of Alexander Galloway to explain the idea of protocol and how the hacker interacts with these protocols. McKenzie Wark's hacker type was explained through class struggle, while the Invisible Committee see the hacker as a resistance against the government, and Anonymous is a hacker group without a concrete political objective. Even if their main objective is rejecting oppression, which is political, Anonymous does not formulate what oppression would be, and what the hacker should actually do. They only emphasize that there should be actions, not what type of actions. After analyzing these theoretical texts and manifests, I explained the hacker and his position. In this chapter, I will be using the result of this research to analyze two video games, which have hackers as their protagonists, and I will argue if the representation fits the earlier analysis.

I will be discussing two video games from the same franchise, but both have a different type of hacker as its protagonist. One is more violent than the other, and their way of hacking is different, in addition to an age difference. The first video game I will be discussing will be *Watch Dogs*, followed by its sequel *Watch Dogs 2*. Both video games are Role Playing Games. The player assumes the role of the main character and plays through a narrative. The relevant quality of these games is the way the hacker is depicted in societies in which control plays a key role. At the same time, these are video games, which use algorithms to create and depict these societies, which makes algorithmic control tangible. The player gets to experiment with the idea of controlling this algorithm, and the protocols. Which leads to the questions guiding this research: How does cybernetic control appear in these video games? How does the hacker respond to this control? How does the player experience the figure of the hacker?

#### Watch Dogs

*Watch Dogs* is a narrative game with a simple plot: Aiden Pearce is its protagonist and it is set in Chicago. Chicago is portrayed as a gray, dark city, where gangs are wandering around freely and the citizens are under surveillance by a program called ctOS, with a sub program called ctznOS which actually records anything they do. The citizens are not aware of the fact that they are being recorded, and ctOS is presented as a security system for the city of Chicago. Aiden is capable of watching some of the data that ctznOS collects by hacking into the servers of ctOS. There is a link between the hacker organization DedSec, and the freed footage from ctznOS. This link is shown by the DedSec logo appearing before a cut-scene showing footage from ctznOS, and after the cut-scene. This suggests that the hacker group is aware of ctznOS, but these cut-scenes do not make it clear what they do with this information.

The game is set in a society that Deleuze would call a control society. The society is a dystopian and utopian space at the same time. The citizens are powerless against the protocol, giving them no control and creating a dystopian space. At the same time, the ones that work with the protocol, and have some sort of power over it, can bend things to their will, creating an utopian space. There is possibility for the ones with power and control over the protocols, while the citizen as a dividual has no power or control. The main protagonist is a hacker. Albeit initially not one with political aims. When starting the game, Aiden Pearce has a clear motive for revenge. This is shown in the gameplay during the first sequence in which the player has to act.. Aiden is standing in front of Maurice, and is aiming his gun at Maurice, asking Maurice who ordered the hit. Through the gameplay, the player has no other option than shooting Maurice, but when they do they find out the gun was unloaded. The player is unaware of this, while Aiden knows this, and the player is left in the dark. When the player gets further into the game, he gets to know more about Aiden through the narrative, which

unfolds through dialogue and cut-scenes, they learn that he was collaborating with Damien Brenks, and hacked banks to steal money, which would make Aiden a cracker rather than a hacker, because Aiden uses the weaknesses in the computer network for a criminal reason ("Hackers" 321). During most of the game's narrative, Aiden is a character that is in the gray area between the hacker and the cracker. After the Merlaut Job, Aiden parts with Damien, and his niece Lena is murdered as a result of that job, because Lena was in the backseat of Aiden's car when he was attacked by hirelings. Aiden wants revenge on the people who caused the death of his niece and uses his hacker skills to get the information he needs. Since that day, Aiden Pearce has been searching for revenge, and has been hacking into his enemies' system. His motive is revenge, and during his hunt he kills, steals and burgles.

During the game, there are multiple cut-scenes where Aiden's focalization is the most distinct, his voice-over also guides the player into missions, as Aiden talks to himself at the start of each mission. We can hear a voice-over of Aiden who gives us the psychological motivations for his actions as well as his world view. This appears to be very apolitical at first sight, and only focuses on his personal objective. Aiden's focalization is very black and white. He believes everything is permitted, because his enemies murdered his young niece. The ones who have nothing to do with the death of his niece are usually good, or just morally acceptable people. He does not intend to harm them. However, Aiden has no problem killing Lucky Quinn's goons, or any other man with a small army, even if they did not personally attack his family. In Aiden's eyes his own actions are good because they are based on getting revenge for his niece's murder. Also, hacking people's phones is not perceived as something bad, because Aiden tries to help other people by violating their privacy. These are all criminal actions, but his motivation itself is not criminal, which makes it difficult to either brand him as a hacker or cracker.

Aiden's moral compass is present in the game, because there are side missions in which he intervenes before a crime, murder, or assault is committed. He seems to think that this is something he should do, so he does not just use hacking as a method to earn money. He does seem to be aware of the fact that his actions are illegal and dangerous, because he did not want to have Clara involved in his business. This is emphasized in the sequence where Aiden is fighting goons to get to his nephew Jackson. Jackson has seen all that Aiden has done, all the killing and blowing things up, and Aiden realizes that this might not be who he is. He starts to doubt his own decisions, and his own identity. Aiden talks to his nephew, who draws the conclusion that he might be the healer in Aiden's life, like his healer action figure. When Aiden agrees to this conclusion, his nephew emphasizes that the healer he is referring to is from a game, and life is not a game. Another example is that Aiden actually worries about Bed Bug, a young afro-American man in a gang, and feels guilty when it seems that Bed Bug dies doing whatever Aiden told him to do. But, Bed Bug survives. On the level of the narrative, Aiden shows multiple times that he has a moral compass, but in the last sequence the player has the control. The player can decide what kind of hacker Aiden is, and if this moral compass is still present in Aiden. In this sequence, the player can choose whether to follow the path of the criminal, by shooting Maurice, or walking away, and giving Aiden a second chance of being a different vigilante.

Throughout the game Aiden's stance wavers pragmatically between being a hacker and a cracker. This changes towards the end of the game when he acts most like the hacker figure from the texts of Wark, the Invisible Committee, and Anonymous. During the last sequence of the game, Aiden is the most like that hacker figure: he cares about the society and free information for the people. He takes down the mob boss Lucky Quinn who ordered the hit on Aiden, and says that he cleans up messes like this mob boss because he is the vigilante. This is

a shift in the political stance of Aiden. At first he wanted Quinn dead purely for revenge, while killing Quinn because he is a vigilante implies a different more societally oriented goal. It is the difference between killing for revenge and killing for the benefit of Chicago. In that same sequence, Aiden hacks into Quinn's computer and manages to gather much dirt and information on many powerful people, such as the mayor who was being controlled by Quinn. Aiden's voice-over tells the player that he finally feels awake, even though Lena is dead, and he will never be able to change that. He might be able to do something to make a difference. As a result, he uploads the video of the mayor murdering Rose Washington. Exposing this mayor is for the benefit of the citizens of Chicago, who did not know about the fact that this mayor was the puppet of Lucky Quinn. Aiden makes a political move by exposing this information. Aiden says that "Blume's hands are bloody, I am done with secrets". This is referring to the idea that information should be free, and that the people should have the same access to information as the companies. This idea combined with Aiden's exposing action marks his transition into a vigilante hacker, since Aiden's act of uploading everything is very political. Furthermore, it also shows that ctOS has ctznOS in it, and that this program records even the most private moments. When he does this, his former partner Damien becomes outrageous since he does not have any leverage left. This difference between Aiden and Damien shows the difference between the cracker and the vigilante hacker. Damien is a cracker who just wants to extort and gain money, while Aiden has a bigger motive, namely freeing the citizens of Chicago. Out of anger, and fear that Aiden will come and look for him, Damien tries to stop Aiden from rebooting the system by using ctOS. Aiden works with Raymond Kenney, a whistle blower for Blume and contributor to the original ctOS, Raymond knows a weakness in the system that Aiden can use, which makes it possible for Aiden to hack ctOS and shut it down. When Aiden confronts Damien, Damien asks if Aiden feels absolved,

because his cause was noble, which seems to shed light on how crackers see Aiden's revenge motivation. The cracker is self-centered, rather than society-oriented, and thus would not agree with the release of sensitive information that they could possibly use for extortion. The shift Aiden makes from cracker into hacker is emphasized by one of the last things he says in the game, after he mentioned that he is a changed man: "everything is connected, and I will use that, to expose, to protect, and if necessary to punish".

As a hacker anonymity is of great concern, because you do not want t be traced back to your own identity. This is portrayed in one of last phrases that Clara says to Aiden: "In our world we hide in the dark, behind monitors. That's the only place we feel safe . . . When this is all over. I hope we can at least talk. Or that I can disappear, that's what I'm good at". For her, it seems that anonymity is the only place she feels comfortable in, and because she is anonymous, she can disappear. Anonymity is a problem for Aiden Pearce, he tries to keep his head low and not to get any attention. When trying to look him up in the ctOS system, the security camera's see a pixelated image, his age and occupation are shown as "error". Aiden has hacked into the ctOS system, and made himself as anonymous as possible. When he enters enemy territory he pulls his mask over his mouth and nose to keep people from recognizing him. For non-hackers, he is not an easy target to find, because he uses the protocols to mask himself. However, his enemies do seem to find information about him and they know who his family members are. When walking on the street during the game, some pedestrians recognize Aiden as "the vigilante", which is his nickname. While he tries to stay anonymous to keep the ones he cares for safe, he is recognized because of his actions on the street. In one sequence the importance of anonymity is once again addressed as Damien manages to place a photograph of Aiden as the vigilante on all the billboards and other screens in the city. The first thing Aiden does is remove these images by tracing the signal of

this photograph. Anonymity seems to be difficult when trying to rid the streets of crime, and getting revenge for the murder of your niece.

The opinion of the citizens, and society, are somewhat divided. The hacker works in a gray area, making illegal moves, but sometimes in the favor of the citizens. This is reflected in multiple news segments that are shown in the background of the video game. In the beginning of the game, a news reporter notes that some people call Aiden a "terrorist", but the news anchor notes that Aiden cannot be called a terrorist, since he does not have a clear political standpoint. The news segments change based upon the action of the player, ranging from people calling Aiden "another gangster in a gang war" when he is violent and kills innocent citizens, to people recognizing him as a vigilante, not wanting to give him up to the police and thus protecting him when he protects citizens. Another moment when the opinion of the common man is important is when Aiden tries to get the remote to enter the so-called bunker. He has to get this from a man called Tobias, whom he does not hurt, and this man sees Aiden as the vigilante and gives him the remote after recognizing him. He asks for a nod in Aiden's manifesto, who replies that he does not have one, but Tobias is convinced that he will have one. This shows that Tobias sees the political motivation behind the actions of the vigilante, and sees this motivation as something positive. On the level of the gameplay, the player's decisions make it easier, or harder, to move around the city. The narrative in the background, based on news segments has its foundation on the level of the gameplay. The player decides if he wants to be violent, or if he wants to be peaceful, and this results in a different narrative in the news segments. But the player does not always have the power to control Aiden's actions. Some of the missions always give Aiden a more positive reputation rather than a bad one, which makes the narrative steer him towards a less violent hacker.

DedSec also gets portrayed by the media, but mostly in a negative way. The news reporter calls DedSec a terrorist group, even though DedSec calls themselves "canary in the coal mine", which gives them a different purpose. Like a canary in a coal mine they see themselves as the ones to warn the common people, like a canary that dies due too much carbon monoxide and so warns the miners for the danger. Another negative example is when the mayor of Chicago gives an interview on the radio. He argues that the police should have more information and access, calling DedSec cyber-terrorists, he tells the interviewer that he wants to flush all the DedSec members out of hiding, and find them all. At the end of the game, when all the information and videos are shared with the public by Aiden, the news reporter explains that the video of the murder of Rose Washington is probably faked by DedSec. Even though the player knows this not to be true, the common man in the game does not, and the media is trying to portray DedSec as a group with bad intentions.

The player has access to more information about DedSec, because they play as Aiden, who sometimes interacts with DedSed. Never directly, even though Clara was a part of DedSec, she did not represent them when talking to Aiden. DedSec communicates with the Chicago citizens through hacking the radio and screens in the city. One of the messages they share with the citizens is that they are given the illusion of control, that they are being manipulated, and brainwashed. They also argue that it is only a matter of time before the opinion of the people are not their own anymore, and DedSec asks them how far they will allow this to go. They want to warn the people of Chicago for ctOS, and mostly ctznOS. The player can unlock more information on DedSec through the level of the gameplay. If the player hacks certain servers, videos appear with DedSec logo's. DedSec's logo and name is displayed whenever Aiden finds a ctznOS video, emphasizing the fact that DedSec knows about ctznOS. DedSec mentions they are at war, they do not directly point to their opponent,

but it is known in the game that DedSec tried to hack and take down Blume, the organization responsible for ctOS, making Blume most likely their opponent. This is even more clear when DedSec mentions Raymond Kenney in one of their broadcasts, they call him a hero, because he used the protocol of ctOS to manipulate the system. One of their key points aligns with the earlier hacker types, namely the fact that they believe that information should be free. DedSec tries to gain control over ctOS, and therefore over its information. When Aiden is close to ctOS, DedSec contacts him and tries to persuade him to give them 30 seconds of access, so they can take over the system when it is rebooted. They claim that they would be the watchdogs, however, Aiden has had enough of the secrets and decides not to let them in, in this case the narrative cannot be influenced by the gameplay and the player has to accept the fact that Aiden rejects DedSec. DedSec is shown as a hacker group with much skill, information and the goal to do good for the citizens of Chicago, They are not capable of hacking into ctOS alone, because they do not know that protocol like Raymond Kenney does.

In the previous paragraphs, I mainly focused on the narrative and sometimes with the link of how the gameplay influenced the narrative. To make a clear distinction between the previous paragraphs, and the upcoming ones, I will briefly summarize my narrative analysis. *Watch Dogs* shows a society where the hacker, Aiden Pearce, starts out as an apolitical hacker, with only a personal objective. His personal objective, revenge, is the guiding light for Aiden's actions. He kills, shoots, and hacks all for that one purpose, but he is not necessarily evil, because he does want to help people out and stop crimes from taking place. However, this changes when he notices what he has become. He starts becoming more political, when he exposes all of Lucky Quinn's sensitive information. After he has tied up all loose ends, such as Damien, he is capable of truly becoming the political vigilante hacker.

But how does this representation unfold on the level of the gameplay? How does cybernetic control appear in these video games? How does the hacker respond to this control? How does the player experience the figure of the hacker? I will answer all of these questions on the level of the gameplay in the following paragraphs.

The gameplay of Watch Dogs consists of a few elements: hacking, shooting, driving and generally moving. The majority of the game involves hacking, but there are multiple varieties of hacking. During the game, Aiden has to hack into the system of ctOS, before being able to hack into the server room and take control of the server. This act of hacking is shown as a type of puzzle, where the player has to connect different lines and guide the connection through the right locked nodes by turning the right switches. The player uses the tools, in this case a simulated type of tube, to guide the flow of information to the right places without disturbing the process. This act seems to be complacent with the idea of the hacker working with the protocol and system, rather than trying to destroy it. However, the player has no option of doing anything beside following the nodes. So, unlike the hacker the player is stuck within the protocol of the game. Another variety of hacking is the way the player hacks into cameras, cars, traffic lights, and the likes. This part of the gameplay is simpler, the player just presses a button on the controller and the object is hacked. This differs from the way hacking works in real life. There is no code, and gadgets usually do not work that fast. This fast way of hacking fits the medium, since the player does not want to code for hours before being able to hack into the servers of a camera. This creates a strange relationship between the player and the game, if the player should be a hacker. The hacker plays with protocol, while the player is stuck by using the protocol that the game makers have created. The player cannot completely make their own decision, he always has to choose between the options created for him, which creates a strange relationship with the hacker character, that should be able to do whatever he

pleases. Besides this hacking, the player has to do much shooting, which does not necessarily add up to the hacker. The player has access to many weapons when he buys them in the gun store. Hacking is the most prominent gameplay feature, which is also intertwined with the others. While Aiden is driving, he can trigger traffic lights to stop his pursuers and during combat scenes he is capable of exploding objects, or raising guards to strengthen his position. Aiden is also capable of hacking the equipment, and surroundings, of his targets.

But contrary to what one might suspect, Aiden is not in total control of everything, and even works against control that people are trying to have over him. In the gameplay, the player can be hacked by other players. The player gets a notification that he is being hacked and that he has to respond. The player has to guide Aiden toward the hacker so he can physically end the hack. But this is not the only case when Aiden has to fight against control. If the player is a violent hacker, sometimes people will call the police when Aiden is nearby. If the player does not intervene, Aiden will be tracked down by ctOS, which appears as a few yellow circles on the mini map below. The player has to move outside of these circles, or be tracked down. Aiden does not feel the control of ctOS as much as other citizens, because he has altered his own profile, and therefore is not under as much surveillance as the rest of the citizens.

*Watch Dogs* is not a strongly political game, it is more half political. Firstly, since Aiden Pearce is only half political, being a character that is in the spectrum between cracker and hacker. Aiden just cares about getting revenge and his own goals, but sometimes has a moral compass. It is hard to say that Aiden is only a cracker, since his goal is revenge and not necessarily murder, and therefore he does not have a criminal reason for his hacking. Secondly, when Aiden Pearce transitions from a cracker into a hacker, he does not have any intention of creating a different (utopian) community. Even though he becomes a watchdog, trying to protect the people of Chicago, and punishing those who deserve it. His motivation is based on the aversion of people like Lucky Quinn. He does not intend for the society to change, he just wants to remove the bad apples. The same is present in the gameplay. During the game, the hacking is prominent, but it is more a tool for Aiden to get whatever he wants, rather than a political act. The political nature of hacking is something that only happens at the very end, when he discloses all the information to the public. The player has to stay within the boundaries of the game maker, instead of playing with these boundaries like a hacker would. This creates a paradox between the idea of the hacker working with the protocol as he pleases, and the player being stuck with the options presented to him.

# Watch Dogs 2

*Watch Dogs 2* is different by its nature: this video game is more politically motivated, and so are its characters. But that is not the only difference between these games. *Watch Dogs 2* has an extremely contrasting atmosphere comparing to *Watch Dogs*. The city San Francisco is shown in bold bright colors, and its protagonist is Marcus, a young adult man who is part of DedSec. San Francisco has colorful graffiti in abundance, and the characters make many references to nerd pop culture related to the world of the player. They refer to things like Dungeons and Dragons, Magic the Gathering, the Matrix films, Arnold Schwarzenegger, Knight Rider, Star Wars, Terminator, and Need for Speed. Just like in *Watch Dogs, Watch Dogs 2* has ctOS as a system that is applied to San Francisco, and even all the other cities in America. This ctOS is an updated version of the ctOS that was shown in *Watch Dogs*, it is called ctOS 2.0. This time around, Blume was prepared for hackers, and so it is harder to get into the system. The citizens in San Francisco know about ctOS, but not all of them are aware of the impact of this system on their life, or what it is recording. Sometimes citizens do protest together with DedSec, showing that their eyes were opened by DedSec and their messages.

How is Marcus the hacker represented? In the first mission, Marcus is told by DedSec to remove his profile from the ctOS server, something that has not been done before according to them. He is shown as an able, quick, and charismatic hacker. He is also driven, since he remains in a small room that is about 50 degrees Celsius to get access to the mainframe of ctOS, and complete his mission. He is being tested by DedSec, and he knows he is. He is eager to become a part of the hacker group DedSec. He aligns with their political views, which makes him more of a hacker than a cracker. But he does not have a clear internal motive at first. During the game, Marcus develops his own political opinion, which still aligns with the goals of DedSec, but he tries to use hacking to get a message across. An example of this is that a rich CEO of a pharmaceutical company called Gene Carcani wants to buy a new album of a rapper called Bobo Dakes all for himself. He wants to make this album exclusive for himself. In the game, Marcus and the rest of DedSec argue that this man is bad, because he drove up the price of the AIDS-medication only for profits. This is a link to the world of the players, where Martin Shkreli did the exact same thing. In this way, the game is political even outside of its own world. Marcus decides that this man should be taught a lesson. They managed to hack into the phone of Bobo Dakes, create multiple audio fragments they can use in conversation and call Gene Carcani. This conversation results in Carcani transferring money over to a leukemia charity, even though he thought he was paying Bobo Dakes for his album. Carcani is left with a loss of 20 million, and no album. Marcus wants information to be free, and not that a rich man can buy information or music to keep it from the masses, since the masses should have the same information as the rich.

Even though Marcus is the protagonist, the game does not only use the focalization of Marcus, the members of DedSec are very prominent and their opinions are too. This is important, since Marcus is part of a hacker collective, in this collective they share a goal, rather than everyone working on their own. Unlike Aiden in Watch Dogs, DedSec cannot have one personal goal, because they are a collective. Marcus does interpret actions, and the player mostly gets his view. For example, one of the moments when Marcus's focalization is more prominent than the focalization of the other DedSec members is when he finds Horatio's body. He tells the rest that Horatio is dead, and Sitara keeps telling him to leave. He goes into a blind rage and decides to go after the murderers. The player can choose whether to use violence or to keep hacking as a main action, even if Marcus was already walking around with a gun. The society of DedSec supports Marcus and his actions to take revenge on Horatio, by giving him information about the whereabouts and actions of the gang members. In the end, the player has to kill a few gang members, even if they choose to hack as a main action. Instead of having a political motive, they are now driven by a revenge motive. The gang members are portraved as purely bad people, who need to be punished for the murder of Horatio.

How is the hacker group represented in *Watch Dogs* 2? In *Watch Dogs* 2, DedSec is far more prominent than in *Watch Dogs*. First of all, Marcus is part of this hacker group and shares it political views. DedSec is works with Open Source codes, making it clear what their code is, and making it available for everyone. Other people can choose to share information and exploits, and this is how Marcus learns certain skills. DedSec says that they does not agree with the technocrats and they try to rise up against them. Sitara even mentions that they are working against a system, by which she means ctOS, which processes the information of the citizens and turns them into Deleuze's dividuals. DedSec tries to educate the masses, and tries to motivate them to rise up against the system. Some of these people choose to support DedSec and share their processors, but not their information.

DedSec is also used as a source for the news. When they expose New Dawn, the media uses the footage that DedSec made of the inside of the most secure space of New Dawn, where their holy tablets are hidden. These tablets are easily broken by Marcus, because they were fake and hollow. This footage is shown on the news, without judging the breaking and entering of DedSec, or saying anything positive about DedSec. Later in the game, the news reports that many of the citizens in San Francisco are supporting DedSed, even if they do not support their methods. In *Watch Dogs 2*, DedSec does not seem to have a bad reputation, which they did have in Chicago, in the original *Watch Dogs*.

The representation of the hacker is extended by showing different approaches of different hackers. The other voices appear in the final mission, the focalization changes as the player has to play as Sitara and Wrench. Sitara does not have any weapons or gadgets, and so the player can only walk and hack when playing as Sitara. When the player hacks one of the ctOS servers, the hack is more difficult, since the player cannot use the quadcopter to get an overview. The player is only capable of walking around to make the tubes guide the energy to the right end point, even though the hacking still works the same. Sitara gives Marcus data which gives him a location for Wrench, so Wrench can blow up the Blume servers containing the profile of Marcus, in which Marcus has been marked as dangerous. When switching to Wrench's focalization, the player does have weapons, since Wrench is the character that always wants to destroy things. He is also capable of hacking camera's, but unlike Sitara he uses violence. Wrench does not have the same skills as Marcus, who is capable of disturbing communication between the guards and possible reinforcements, while Wrench just has to deal with these extra reinforcements in a violent manner. The music becomes more aggressive

than when playing Sitara. The player gets to blow up all the Blume servers. For this mission, the player is connected to these character rather than Marcus, which only emphasizes that Marcus is a part of DedSec, and so is the player. But also emphasizing the different kinds of hackers that are part of DedSec, violent ones, but also the ones that will not use violence. There is a variety of people in DedSec, and this is made explicit in an audio file of Horatio. He explains that every member of DedSec has a reason to hate big data, or Blume with its ctOS, but their approaches differ. Their members fill the full scale from anarchists to activists. Marcus explains in a later conversation that this is not a problem. You can not control all the hackers, but as long as they carry out the right message, it is fine according to him.

Anonymity is a very prominent subject in *Watch Dogs 2*. The first mission the player has to finish is to erase the profile of Marcus, making him completely anonymous. Marcus also uses a mask like Aiden did in *Watch Dogs*. When DedSec asks the public to protest against New Dawn, a church in *Watch Dogs 2*, they ask the public to take up a mask. In this way, they will protest as a homogeneous group of anonymous citizens against the church. Anonymity seems to be the main goal for the hackers, and usually when they are threatened, the threat is that they will be exposed with their real names. One example of this is when Kiki, another hacker that used to be part of DedSec, threatens to reveal the names of the members of DedSec. If they want to prevent this, they have to make a video showing that they are not worth following, but DedSec does not want to abandon their goals. In the end, the player hacks into the base of this Kiki, and takes down her operation. This way everyone in DedSec remains as anonymous as possible.

When Marcus finds out that DedSec is being used by Blume's CEO, his ctOS profile is once again on-line. The police are now looking for him, and he has to flee. His anonymity is compromised, and he is once again the victim of ctOS. It seems like it is the end of DedSec, since society no longer respects them, but they regain confidence after meeting Raymond Kenney. Kenney says he can erase the profile of Marcus, and DedSec continues their operations with Kenney on their side. Kenney is heavily focused on being anonymous as well, seeing as he refuses to take a picture with Josh, the autistic DedSec member of Marcus's team.

Another character that values anonymity is Wrench. During most of the video game, he is shown with his electronic mask on. On the spot of his eyes there are two screens, these screen function as his eyes, showing eyes in an emoticon style, examples are "O O" and "^ ^". When Wrench is being held by the FBI, they remove his mask and try to break him. He does not respond as smart-mouthed as he usually does, just negatively. The antagonist, Dušan Nemec, comes onto the scene, and makes it so that Wrench completely loses the mask, this way the world "can see him for who he really is". Marcus is angered, and decides to take the mask back. For Wrench that mask, that anonymity, is a big part of his identity and his whole attitude becomes meek when losing it. This is exactly what triggers Marcus to get the mask back.

At the same point in the game, another mission involving a DedSec member and his lack of anonymity is active. This other mission involves Horatio, another DedSec member of Marcus's crew. When Horatio gets recognized by one of the Tezca gang members, they kidnap him and take him hostage. They want access to all the information that DedSec has, but Horatio refuses and gets murdered as a result. Anonymity is a status the hackers are desperate to have, but this seems to be a problem while they are being so politically active and in in the spotlights.

DedSec has a different image in *Watch Dogs 2* than it had in *Watch Dogs*. One of the higher people in Blume calls them a movement that started from a group of pranksters, with their most valuable resource being their followers. The fact that they are called a movement

implies that they have a political goal. DedSec has a very clear political goal, and that goal is transparency for the people of San Francisco. They want to educate citizens, and in Watch Dogs 2, a few of these citizens seem to be listening. DedSec calls for a protest against the Church of New Dawn, which is loosely based upon the Scientology Church, and a couple of handful citizens show up, making it easier for Marcus to hack into New Dawn's system. Marcus and his team analyze the data, and find out that the famous actor Jimmy Siska is being pressured by the church. They use him, and another influential person to get inside New Dawn, and expose their scam. Firstly, they broadcast a video about New Dawn and the way they put pressure on their members, with Jimmy Siska starring as a guest. Secondly, they film the holy tablets, and show the public that these tablets are fake. This one of the operations that the player has to go through, hacking into the systems of bad cooperations to expose their bad intentions to the world. Another way citizens are involved is that they can give you side quests. One example leads to Aiden Pearce, when Marcus goes looking for a young man who has connections to a drug gang, and instead finds Aiden Pearce who is trying to destroy this gang and another gang. Sadly, the young man, Marcus was searching for, does not survive.

DedSec uses their exposure to punish people. One man is distributing child porn, and then the player hacks into their camera. With the help of his DedSec friends he manages to upload a virus on the man's servers. After the hack, Marcus says he wanted to strangle the man through the camera. Sitara says society will strangle him, using the public display of this man's actions as a way of punishment, since society does not look favorably on actions like these, especially when they involve children.

Dušan Nemec – the CTO of Blume – is using them to frighten other cooperations into his protection, because Blume argues that it can protect you against DedSec. This it the reason he boosted DedSec's member numbers, to create fear for the hackers breaking into their systems. This is a major setback for DedSec, since their political goal has been used for the commercial one of their enemy. In the end, they manage to expose all Nemec's bad actions, and his manipulative actions, fulfilling part of their political goal. For DedSec, their political involvement is present until the day ctOS is gone.

In this last paragraph, I will look at the representation of the hacker, and hacking in the gameplay, instead of focusing on the narrative. In the interface of Watch Dogs 2, there are already more hacker terms than in *Watch Dogs*. Accessing the skills interface there are seven trees to which skill points can be added. These skill trees are Botnets, Social Engineering, Vehicle Hacking, Remote CTRL, Marksmanship, Tinkering, and City Disruption. The Remote CTRL already refers to the keyboard of the hacking by replacing the word control with the abbreviation that is present on one's keyboard. Some of these skill trees are very straightforward, such as Vehicle Hacking, which presents the player with multiple options to hack different kind of vehicles. However, Social Engineering is a little less straightforward, and mainly offers skills for the player to use people's personal data and manipulate them. In this way, Marcus can mark someone as a dangerous target, and the police will come for them. The City Disruption skill tree is based upon exploits that people have shared with DedSec. these exploits make it possible for Marcus to hack different kind of objects that are linked to ctOS, such as the traffic lights. The hacking itself resembles the hacking in the original Watch *Dogs*, the player only has to push one button, and the earlier mentioned tubes that guide electricity are back. However, these tubes are now laid upon the world of Marcus, rather than it being a different, abstract, space. The game is more lighthearted, since the side quests are making graffiti, or racing in a kart. In the game, the player uses hacking for political goals, but also for his own entertainment. When it comes to achieving the game's political goals, the player has a choice whether to go in guns blazing, or to sneak using his gadgets and the

camera's. The player can use the options the gameplay offers to become either a political hacker that does not use violence, or become a criminal with the same goals.

#### Comparison between Watch Dogs and Watch Dogs 2

In comparison with *Watch Dogs*, the player has more input in *Watch Dogs 2*, such as the choice to be less violent, and actually use hacking as their main activity. The sequel is politically loaded instead of half political, with references to Google, Facebook, and other big companies that use data. The main character is a part of DedSec and shares their collective goal, rather than a solo hacker with a personal goal. DedSec notices that the big companies, such as Blume, make the local citizen into a dividual, and these companies are using this data to manipulate citizens in any way they want. Like in Watch Dogs, not being anonymous is a problem, mainly for Marcus Holloway, the main character. The player even has to switch to different characters in the final mission, since Marcus's anonymity has been compromised. When that anonymity is returned, the player can resume playing with Marcus as their character. This contrasts with Watch Dogs's sequence when Aiden is no longer anonymous, since he has to deal with it himself, for he is not part of a hacker group. The gameplay in Watch Dogs 2 is more embedded in the world of the characters, rather than being a space outside of the world of the character like in *Watch Dogs*, where the electricity puzzles were shown on a different kind of screen. The antagonist in this case is not another hacker, it is the CTO of Blume. This CTO does know how to code, but is no hacker. It is a more explicit hackers versus the companies than in Watch Dogs, where it was Aiden Pearce versus the one that killed his niece. The society works with the hackers in *Watch Dogs 2*, showing that they want to know more, and sometimes want to be freed from these cooperations.

The main difference between the hacker types in the two video games is their goal. In *Watch Dogs*, the goal is revenge, which later changes to the goal of protecting Chicago. Hacking in *Watch Dogs* is only a tool for his personal goal, mostly shown as puzzles. In *Watch Dogs 2*, the hackers are working on their mutual political goal, straying from this goal and shifting to revenge for a short period when one of their hacker friends is murdered. Hacking is still represented as solving puzzles, and pushing a button, but the layout has changed. The hack is shown as a layer on top of the real world. To define either of the hackers from the *Watch Dogs* series as a cracker is quite difficult, because in both cases their reasons are not criminal, yet they are handling it by doing illegal actions such as shooting people, and breaking into places.

The *Watch Dogs 2* hacker works within a group, and in this group are many types of hackers, while in *Watch Dogs* there is only one main hacker who has a violent approach. The difference between the solo hacker and the group hacker is shown in these two games. When Marcus' anonymity is compromised, his friends help him, while Aiden has to take care of these problems himself. Even if he gets Raymond Kenney as a fellow hacker, he does not get the same support as DedSec has in *Watch Dogs 2*. DedSec also gains the support from the society, while Aiden does not get any support from the society. The hackers in *Watch Dogs 2* are more accepted by society and have a more political function and goal.

# 3. The Hacker in Television Shows: Mr. Robot

In the previous chapter, I analyzed the hacker figure in the video games Watch Dogs and Watch Dogs 2. In both cases, I analyzed the representation of the hacker, the organizations, and society, as well as the gameplay. In this television-series I will focus on representation, since this medium differs in the sense that it does not have an interactive component. In Mr. Robot control is extremely important, however, the nature of control differs in both seasons. In season one, the hacker gains control by rejecting the control that the conglomerate E Corp has. While in season two the hacker finds out he never truly had that much control, because the FBI knew about them all along, but still the hacker tries to gain control over himself. In both seasons the theme of control has different aspects and causes different tensions. I will first discuss season one, starting with a global analysis. Secondly I will discuss the theme of control. Thirdly, I will analyze the representation of hackers and hacking. Fourthly, I will analyze the representation of the conglomerate. After that, I will analyze the second season in the same order, and end with a comparison of the two seasons. This time I will ask the questions: How does cybernetic control appear in Mr. Robot? How does the hacker respond to this control? I will divide this chapter in three sections; first I will answer these questions for season one, then I will answer these same questions for season two, and I will end with a comparison of the two.

# Season One: The Hacker in Control

*Mr. Robot* is a television-series about hackers that started in 2015. All of the titles of the episodes of season one end in video file format codes, such as .avi or .mov. The names of the episodes also refer to leetspeak, a language used on the Internet, where letters are sometimes replaced by numbers or symbols. The first episode is called *Hellofriend.mov*,

which is an inside joke that is meant for programmers. Programmers often start with the computer program *Hello, World!* when learning a new programming language, since it is basic and the results are almost directly clear, either *Hello, world!* appears on the site, or it does not<sup>4</sup>. In this case, it is used as the title of the pilot, which is an introduction for the viewer, who is directly addressed by the protagonist. This explains the change from *hello world* to *hello friend*. These details already emphasize the hacker aspect of the television-series, going beyond being a television-series about a hacker. It models to the conventions of programmers by using the terminology that programmers use, not only in the titles of the episodes, but these terms are also used by the characters in the television-series. It refers to known objects for programmers, such as the video files and *hello world*, which is missed in most representations of the hacker. This is the reason that Esmail decided to create *Mr. Robot* in the way that he did, since he missed a realistic representation of hacking that went beyond what Hollywood had shown up until then.

The protagonist of *Mr. Robot* is Elliot Alderson, a young man working at All Safe, a cyber security firm that works for corporations by protecting their servers. Elliot is a young man with social issues, drug addiction and mental health issues. In the first episode, he mentions that he has schizophrenia, which makes the viewer question the truthfulness of his depiction of reality throughout the season. The voice over, with its direct address already suggests that on the level of the soundtrack we have a character-bound narrator. But the same turns out to be the case on the level of images. Or rather: at times it is. This becomes clear in an early scene when we see Elliot rants out loud to his therapist, only to later reveal that he had been silent the whole time, and that the rant, in reality, only took place in his mind. This scene establishes not only that there is a difference between 'objective' reality and Eliot's 4. For more on this, look at the book: Professional Embedded ARM Development by James A. Langbridge.

perception of it. It also suggests that we, as viewers, cannot be sure whether or not the images we see are Eliot's 'reality' or those of an external narrator.

Throughout the early parts of the series we discover that Elliot has a habit to analyze people, like he would analyze programs. He uses the language that one uses when talking about programs, searching for weaknesses in their system, calling these weaknesses exploits like he would in a program. Elliot even reads the code of the drugs supplier of Shayla as a program, linking words to actions, and revealing what was the hidden truth underneath his tweets. Another example is the explanation that Elliot gives for bugs: "A bug is never a mistake, it represents something bigger. An error of thinking that makes you who you are". He argues that people have bugs, seeing as the scene shows Angela, his friend, giving a man back a wallet, which she thought he had dropped, but he had actually stolen. In this scene, her kindness was a bug, since it made her give the wallet to the wrong person. This is further explained when Elliot says that Mr. Robot has not yet found his bug, and thus cannot manipulate him, this is exactly why he never shows anyone his source code. In this sense, he even sees himself as a program with a source code, bugs and exploits. He is able to do so, because he understands people as 'dividuals' as aggregates of information that is stored in databases. He sees Wellick's Facebook page and e-mails, and calls this Wellick's life, paralleling real life with social media where people share their photographs and the events that happen. He does the same to his friends and therapist, searching through their database, and other digital information they have. Elliot constructs a view and opinion on these people based on their on-line information, based on their database information. He even calls people a security flaws, and say they make the best exploits. But what is an exploit? "Protological struggles do not center around changing existent technologies but instead involve discovering holes in existent technologies and projecting potential change through these

*holes. Hackers call these holes 'exploits'*" (Galloway and Thacker 81). Elliot sees people as a part of the protocol, and knows how to use them to bend the situation to his will.

Another pointer to the fact that Elliot sees people as database constructs or programs is that he argues that they have daemons. Elliot describes daemons as programs that run in the background without user interference. He compares it to impulses, people just act their feeling, without much thought<sup>5</sup>. It is a response, an action or a reaction to something that people do not think about. After that he argues that he has more daemons than most people. He seems to be referring to his schizophrenia, but he does not explain exactly what he implies. Near the end of the first season, Elliot discovers that Mr. Robot is part of him. He sees himself choking Mr. Robot in a coffee shop, but the rest of the world sees him strangling himself. This in combination with the idea of a daemon is what Elliot is referring to when he argues that he has more daemons than other people do. Seeing as Mr. Robot is part of him, and Elliot has no control over him or his actions, and even forgets or does not know what Mr. Robot does, even though he is in the same body, it seems that Mr. Robot is one of Elliot's daemons.

#### Season One: Gaining Control

Starting from the first scene, it is apparent that control is the main theme of *Mr. Robot*. In the first episode, Elliot shows that he has control in a sequence with a coffee shop owner, who secretly owns a child pornography server. In this shot reverse shot sequence, Elliot explains that he liked the coffee shop, but the Internet connection was so good, that "that part of his brain was scratched", by which he means that something feels off. The coffee shop owner's shots become close-ups when Elliot tells him that his protocol is not as anonymous as he thought, and that the one controlling the exit nodes also controls the traffic. Elliot explains

5. This idea is similar to the idea of Freud's id in the ego.

that he now owns everything, and the owner starts to freak out, asking Elliot what he wants. He offers Elliot money, but Elliot says he is not interested in that, and tells the owner that he left an anonymous tip for the police before leaving. This display of control is the way that Elliot is introduced to the viewer. At this point, Mr. Robot is not yet present, and Elliot was in control of this action against the coffee shop owner.

Control is very important for Elliot as a hacker, but also in his daily life. Even though Elliot is introduced as a hacker who is in control, this image breaks down during the series. During the visits to his therapist Christa, she mentions that he has an issue, the issue of not being in control. He freaks out, and seems to rant to his therapist. He asks how we are in control, are we in control by picking the best of two options, such as Burger King or McDonald's. He shouts that this is all the same blur, and that it is an illusion of control. In the end, he has said all this in his mind, but not to his therapist. Elliot seems to lose control more and more during the series. When Mr. Robot takes over, he has no clue what he does, parts of his memories are missing. This matches the idea of Elliot with more daemons, programs running in the background without his interference, than the average person. Control is something that Elliot craves, but also fears since he loses control more often than he wants to. Control is also an enigma to him, since he has no clue how to maintain it, obtain it, or notice when it is gone.

How does this hacker respond to the cybernetic control in the control society in *Mr*. *Robot*? Elliot argues that he is a vigilante hacker by night, and that he wants to save people, because they are still positive and naive and he wants to keep them that way. Elliot talks about the invisible hand that brands people with an employee badge, and the hand that controls us without us knowing it. This is what he wants to save people from. He does this by thinking of a hack, and executing this hack in season one. This is Elliot resisting the cybernetic control, by getting in the system and working with the protocol for his own objective

#### Season One: The Hacker Gaining Momentum

In this section I will discuss the hacker and the representation of hacking in Mr. Robot season one. The representation of hacking and hackers is more realistic in Mr. Robot than it was in earlier media, such as the video games mentioned before, mainly showing that hacking is not just a push of a button. Mr. Robot shows the code that hackers use, using the command section of windows. Hackers use terms such as rootkits, protocol, bugs, and daemons, which suit the hacker figure. During the first season, Elliot and other characters make multiple remarks about hackers, or what it is like to be a hacker. The series even seems to be aware of the problems of giving a realistic depiction of hackers. One of the members of fsociety calls the Hollywood representation of the hacker "Hollywood hacker bullshit". The member of fsociety, who called these representations flawed, was actually holding one of his gadgets that hacks the car lock. He had to wait a few minutes before connecting, emphasizing that these actions do not just happen without effort. This is also emphasized when Elliot is called to All Safe when a DDOS-attack is targeting the servers of E Corp. Elliot notes that "every hacker loves attention, they don't just do DDOS with no reason", he argues that these kind of hacks and attacks are not just for fun, but there is a certain reason behind hacking. Just like Wark argued that in the beginning of hacking, the reason was acknowledgment from other hackers (Hackers 321). Elliot argues that hackers use the real world as an encryption, as in hackers hide their actions and code in the real world, for example the way Elliot stores his information. He burns them on disks, leaving behind no trace on his computer, the encryption is that someone has to physically grab the disk and let a computer read it. Another example is

that they hide their hacker identities behind the identity they have in the real world, such as the cyber security officer, or the teacher. Their hacker identity is hidden behind their real world identity, since the hacker identity is for the most part virtual, unlike the identity of a teacher. The hacker identity arises when the hacker can code, which requires the virtual world. This emphasizes the paranoid attitude, the desire for control, and distrust of corporations. Near the end of the season, Elliot underlines this by saying that hackers inherently trust no one, and that a friend will never be able to look over his wall, referring to a firewall of sorts. This paranoia, and self-protecting attitude is something that also appears in other hackers. One of the hackers it is most prominent in is Whiterose, a hacker from the Dark Army, a Chinese hacker group. Elliot says they have trust issues, and they are paranoid. Whiterose shows this paranoia, by trying to control everything around the meeting with Elliot. Using beeps as a sign that a minute has passed, he is also in disguise, and works with gloves on. This way he is as anonymous as he can make himself, which feels safe to this hacker. This idea of the anonymous hacker is also present in Elliot. He does not have a Facebook page, which at first is not a problem, but when Elliot gets an identity crisis and tries to find out who he is, he finds nothing. He searches the Internet, and there are no results for him. He wonders if he is a ghost, but then finds a CD without anything written on it, and finds a lot of photographs of Mr. Robot and himself. This is when he finds out that Mr. Robot is a product of his imagination.

The analysis in the paragraph above shows us that there are different types of hackers, even within Elliot. Elliot is a paranoid hacker, trying to control everything that he can possibly control. This is difficult, because he does not even control his own condition, seeing as Mr. Robot sometimes takes over without him knowing. These gaps in his memory make him a very difficult focalizer to trust. The hack that changes everything was organized by Mr. Robot in Elliot's body, which complicates things for the viewer, but also explains certain scenes. Tyrell Wellick offered Elliot a job in the first episode, but Elliot said he wanted to think about it. Later on, the viewer sees Mr. Robot in the car with Wellick. At this stage, it is not yet apparent that Mr. Robot is Elliot, but the case is most likely that Mr. Robot accepted Wellick's offer in some way, since they were working together. This is odd for the hacker, since Wellick is part of the corporations, but Mr. Robot is an anarchist, and will do anything to get to his goal. However, Elliot is not like that. As was shown in the first sequence, when he confronted the coffee shop owner, but also when he decided to hack the heating system in the storage facilities, rather than killing people to blow up the place as Mr. Robot suggested. Darlene, Elliot's sister, seems to be the happy medium of the two, supporting the hack, writing the rootkit, and agreeing with the anarchistic point of view of Mr. Robot, but never becoming aggressive with her hacks. She is a hacktivist, trying to erase the debt of the people who are being oppressed by the big conglomerates.

#### Season One: Conglomerates as an Abstract Structure

In *Mr. Robot* the fight is between the hackers and the conglomerates, between the power of the conglomerate and the resistance of the hackers. The main conglomerate is E Corp, which, in Elliot's mind, means Evil Corp. The characters associated with these conglomerates are often wearing suits, and are rarely shown in casual clothing. Elliot says that conglomerates have no heart, and Wellick says he should not be a cold robot when practicing his speech in front of the mirror. These kinds of remarks make it apparent that at this point the enemy is not a person, but a heartless abstract, a system, a corporation. The enemy is something abstract rather than a person, which aligns with the society of control where the

physical factories of the disciplinary society have been replaced by something abstract like a corporation..

Within this abstract system of the corporation, there are also victims. Tyrell Wellick works for E Corp for most of season one, and does whatever he has to do to survive and grow in this world. He makes sure that Elliot comes to meet him, while he is surrounded by lawyers, who at first all appear out of focus to him. He calls them the one percent of the one percent. This sets the tone for the character Wellick, who is advised against offering Elliot a job, but still does because he thinks it might help him. Wellick is well-aware of the protocol of the conglomerates, and tries to work within these protocols to gain personal power. He searches for exploits of people he has to manipulate to grow, like a hacker would search for a weakness in a program. Galloway and Thacker note that this way of thinking, looking for exploits, is the difference between thinking about probability and thinking about possibility. The informatic space is not vulnerable to certain forces that social spaces are vulnerable too, such as political pressure, but informatic spaces have other vulnerabilities like bugs and holes, which makes change possible. In this way, informatic spaces can be influenced like social spaces can, just in a different approach (Galloway and Thacker 81-82). At first, Wellick seems to be in control, even though Wellick pays a homeless person so he can physically abuse the homeless person. When the homeless person asks for more money, Wellick laughs and adds "Spoken like a true capitalist", seemingly not caring for the money as he gives the homeless man more. During this physical abuse, Wellick is wearing gloves so he does not get filthy or leave any traces. The homeless man asks him to stop, but Wellick does not. He goes over the boundary set by the homeless man, which is something that is telling for later on in the season. When Wellick is losing control of his attempt to gain a more powerful position, he makes a fatal error. Once again, he goes too far, because of his desperation, and murders the

wife of the new CTO. In the corporate world, Wellick is constantly working within the system, trying to make his life the best he can, but realizes that sometimes he has no control, and this drives him mad to the point of murder. After murdering that woman and dodging the police as best he can, he disappears after talking to Elliot, who has no clue where he is. Elliot later learns that together they launched the hack on E Corp, and this was partly possible thanks to Wellick's help. Wellick's character is an interesting character, because he worked within E Corp, trying to work within their protocol, failed at doing so and lost control. But at the same time, he was working with hackers and that actually gave him more control than he had inside the company.

Another character which gives another insight of the corporate world is Angela, Elliot's long time friend. The corporate world is something abstract that is capable of adjusting to certain situations, Angela is another example of this. Angela is suing E Corp, since she found evidence which proves that her mother's cancer was caused by E Corps disobedience to the health codes. She starts out by fighting E Corp, and hating everything E Corp is. But later she ends up working there, recommended by the very man that was part of the group that decided not to follow the rules that caused her mother to become ill. One of her first jobs is after the hack on E Corp, she is assisting someone of a high position in E Corp who is going to ask questions about the hack. This interview is remarkable, since during this interview, the one who is asking questions appears to be the camera lens. There is no face attached to the person asking the question, it cuts to the lens, zooming in and showing the reflection of the E Corp employee. This makes the interview very cold and somewhat disturbing, and this feeling only grows since the E Corp employee takes out a gun, and shoots himself through the head. Angela is watching from the sidelines, obviously shocked by the scene. After that, she is sent to the CEO. He acts very casual, as if this suicide was nothing. Angela seems shocked, and

refuses his offer to join his press conference that was going to be held a few hours later. He does give her money, since her shoes are covered in blood. This emphasizes the abstract form of the corporation that adjusts after a person left them, even though this was in a violent and gruesome manner. In the next scene, Angela is buying shoes and the salesman points out that is quite cold that she is buying shoes after what she has been through. She snaps at him, asking him if he knows whom he is speaking to, showing a character development from warm hearted and caring to cold and feeling like she is worth more than another. This is emphasized when she later joins the press conference of the CEO. Angela is also a victim of the conglomerate system. She tries to fight it, they recognize that and try to persuade her to work for them. She does, and this changes her to a cold hearted person. The bug she showed in season one, her kindness, is no longer part of her, and she is now part of the abstract E Corp.

#### Season Two: The Illusion of Control

In season two control changes: instead of rejecting the control of the conglomerate, the focus shifts to Elliot trying to gain control of himself, and the other hackers find out that the control that they thought they had was not as strong as they thought. The FBI has been tracking them from the start, so they were on their radar from the start. The second season continues with the hack from season one that had a devastating effect on society. Rather than focusing on hacking, it emphasizes the result of the hack. Elliot has drawn away from fsociety, retreating to his mother's home and he is trying to keep Mr. Robot from taking over. His sister Darlene is still fighting for fsociety, his friend Angela is now working for E Corp and has become one of the cold people in the company. Tyrell Wellick has disappeared, and even the President (which was Obama at the time) is shown on television talking about the hack and Tyrell Wellick. This season, it is not just the small group of fsociety hackers who are working

against the conglomerates, but also some non-hackers who joined fsociety. These non-hackers have stolen the testicles of a bull statue from Wall Street, which is called the Charging Bull, and they toss these testicles through the window of Congress to make a statement. This statement means that the people working on Wall Street do not have any balls, so not only Elliot and his hacker friends are making statements, but their little army is doing so as well.

#### Season Two: The Loss of Control

In season two, the theme of control has gotten a different aspect. Elliot is trying to gain control of himself, and conglomerates are fighting over control now that the society is unstable. These two aspects of control are shown as two different storylines that occur at the same time, sometimes they overlap, but mostly they are two different co-existing stories. In the storyline of Elliot, he seems to be living with his mother, and he has created, what he calls, a loop for himself, so he can gain control. This loop is actually a rhythm that he follows, his days are scheduled, but he calls this rhythm a loop. However, this is a mask shown by Elliot, since he is actually in a prison, a space related to the society of discipline. Elliot is trying to discipline himself, by creating a loop, and controlling Mr. Robot by being in this loop. His vision remains one of a hacker, since he admires the beauty of rules, but for him behind these rules that create order is an invisible code of chaos. For Elliot, the face of order of the prison is something that is actually based upon a code of chaos. The loop the prison has created for Elliot is what gives him more control, another thing that does that is his journal. He writes everything down, so he does not lose track or control. When he is writing in his journal, Mr. Robot is usually standing near him, and sometimes even shoots him in the head to make a point. The viewer sees Elliot take the hit, but Elliot choses not to engage Mr. Robot by panicking after being shot, and maintains control by asking Mr. Robot if he is done and the

gunshot wound disappears. However, Elliot loses his perfect loop and control, when Gideon Goddard comes by. The earlier mentioned gunshot wound appears again, and he completely loses his control when Mr. Robot pretends to cut Gideon's throat. Elliot is not a violent man, but Mr. Robot is, these actions make it apparent that the control that Elliot had is now gone, since the violence is not made explicit. The loss of control is emphasized by Elliot seeing men in suits again, like he did in the beginning of season one. He wonders how he can stop being Mr. Robot and gain back control. Elliot has no control over Mr. Robot who was a mask at first, but is no longer a mask, Mr. Robot is now a part of him.

This recognition of Mr. Robot as part of himself and the recognition of the loss of control causes Elliot to realize things about his past. Elliot starts to remember the times that he has lost control, and now feels gaps in his memory when Mr. Robot takes over. This loss of control is shown by repeating a scene from season one, the scene where Tyrell Wellick speaks to Mr. Robot in his car, only this time Elliot is sitting in the seat where Mr. Robot was sitting, and says exactly what Mr. Robot said. The unraveling of Elliot's control over his own body is shown by people talking backwards. Once again returning to hacker terms, Elliot calls it kernel panic, and says that he is crashing.

When Elliot accepts Mr. Robot as a part of himself, his control starts to gradually return. Elliot finds out that Mr. Robot has orchestrated things, like his early release from prison and Stage 2 of the hack. Since Elliot thinks he has control again, he becomes angry again, and tries to stop Stage 2. He starts doubting that Tyrell Wellick still exists, and loses all control and has no idea what is real anymore. He says it is time to take back real control by stopping this hack, working against Mr. Robot and Tyrell Wellick, which he assumes is the same person, but this all backfires and he completely loses control and gets shot. Mr. Robot was in control at that point, since he instructed Wellick to shoot whoever would stand in the way of the hack. In the end, Elliot tried to gain control by using the structures of the society of discipline, but this did not work, after that he tried to control Mr. Robot by working with him, but Mr. Robot always knows more than he does, and Elliot is not capable of actually being in control of his own body, or his earlier planned hack.

Outside of Elliot's struggle of maintaining control, there is a control struggle between multiple parties that are all linked to E Corp. The Dark Army is clearly maintaining as much control as they can, shooting people who might talk, such as the boyfriend of Darlene who is called Cisco and worked with the Dark Army. Another person trying to gain control is the CEO of E Corp, he manipulates the people around him, trying to get back to where he was before the hack. He actually managed to get China to pay him to keep E Corp running. This CEO emphasizes that it is the illusion of control that governments have that create stability, and this is why they should invest in E Corp. This way, the consumer keeps spending money, and feels safe, even if this safety is an illusion. Whiterose is working with both earlier mentioned parties. He is a big player in the Dark Army, the minister of Security in China, and a contact of the CEO of E Corp. He manipulates everything in his advantage, working with Elliot on the hack, giving the CEO the money, and making sure that no one talks about his plan. He even recruits Angela, after she wanted to confess her involvement to her lawyer. The politics in season two are a more complicated game of control, where multiple people want to win, rather than the simpler game of power(E Corp) versus resistance(fsociety) in season two. There are more characters involved and it has become a more complicated and complex domain. The CEO of E Corp wants to become the most powerful person, but Whiterose does not have one clear goal, unlike Wellick who just wants to bring E Corp down.

Another aspect of control is aimed at the viewer. The viewer is blamed by Elliot for some of the things in the previous season. He is angry with the viewer, since the viewer did not tell Elliot everything the viewer knew, and therefore was not honest with Elliot. However, the viewer has no control over the interaction with Elliot, and has no real interaction with Elliot. The viewer is only spoken to, but has no way of replying. The viewer misses the control to respond, and thus is left in the dark in this season by Elliot.

## Season Two: The Hacker Losing Control

While Elliot is mainly focused on getting his control back in season two, the main hacker figures are fsociety hackers like Darlene. Darlene remains a hacktivist, trying to maintain some control over E Corp. She guides fsociety followers, and uses hacking as a tool to gain control. Darlene is still very occupied with the war against E Corp, and emphasizes that they are waging a war that they are losing. She is trying to keep everyone involved in fsociety and their plan after the hack. Darlene shows that she is a hacktivist by making the CTO of E Corp burn 5.9 million dollars. By making the CTO wear the mask of fsociety, she manages to maintain control as the hacktivist over the conglomerate E Corp. She makes the CTO do fsociety's actions in the real world, which contrasts with her actions, since these actions are based in the virtual world. However, Darlene also moves through the real space, to make sure that her hacktivist plan is going as planned. Darlene's hacktivist virtual actions have physical world consequences.

In comparison to the first season, the hackers have a problem with anonymity in season two, but this is combined with the illusion of control that Elliot also struggles with. They are no longer anonymous, and therefore they are in danger. The hackers are paranoid and think the murder of Romero was deliberate, which it was not, it turned out to be a stray bullet from the neighbor. This is revealed by Dominique DiPierro, who is an FBI agent. Throughout season two, Agent DiPierro shows that she understands the mindset of a hacker, and this understanding resulted in her knowing everything about the hack of the first season. The FBI has kept an eye on all of them from the start, linking Elliot, Darlene and the other hackers to fsociety from the start. This is revealed to Darlene by Dominique, who realizes they were never anonymous to begin with. They thought they were in control, partially by being anonymous, but this was all an illusion, and they never had the control over the information that the FBI had access to.

The loss of control to Mr. Robot is revealed in season two, but this loss of control is accompanied by the beginning of the existence of Mr. Robot, which is revealed in a flashback. Elliot kept the jacket of his father, and Darlene asked him to wear it along with the mask of the fictitional film The Careful Massacre of the Bourgeoisie.. When Elliot puts on the mask, he starts telling his plan to Darlene. That he should be the Trojan Horse in Allsafe, and while he explains this he looks into the camera in a close-up. The anarchistic hacker in Elliot lives up when he hides behind this mask, he loses control and Mr. Robot is born.

The representation of the hacker and hacking is shown extensively this season. When Elliot is hacking the FBI, he explains all the steps he is taking. He argues that his code is the programmatic expression of his will, and that he lives for this. Describing his code as an expression of his will adds up to the what Galloway and Thacker note about protocol. "Rather, protocol is an immanent expression of control" (Galloway and Thacker 54). By using his code in the protocol, he can express his will through that expression of control. The code is shown on the screen, while Elliot explains what the code means. His terminology such as "pwning a system", refers to the Internet language many hackers use on-line. It is not a push of a button, all code needs time, and is fairly complex.

#### Season Two: Conglomerates as a Patchwork

In season two, the hacker and control have become more complex, but those are not the only elements that have become more complicated. The conglomerate E Corp has become more complex: in season two there are more characters bound to the conglomerate, which creates more of a patchwork rather than the earlier cohesive abstract structure that E Corp had in season one. But this does not only apply to E Corp, even some characters have become part of this patchwork of power and the resistance at the same time. This matches the power structure of the society of control. "Today a patchwork of new networked powers has emerged here and there and started to engage each other. In a sense, the power centers have evolved downwards, adopting the strategies and structures of the terrorists and the guerrillas" (Galloway and Thacker 15). It is no longer just the hacker versus the conglomerate in Mr. Robot, the hacker is no longer the resistance against the established conglomerate. This shift is emphasized by a few characters, such as Whiterose who is working with E Corp, but he is also a hacker of the Dark Army. He is also a minister of the Chinese government, making his position even more complex. He is working with the conglomerate, leader of a hacker group, and the he is Minister of State Security. His position is not the only one that has become more complex: Angela Moss, the friend of Elliot who was working for E Corp, tried to stand up against them by leaking sensitive information. This backfired and she became frightened, and decided to go to her lawyer, however, Whiterose intercepted her before she met her lawyer. This complex character Whiterose makes Angela another complex character when they make an alliance, Angela works for E Corp, but now also works with the hackers. She is now part of the plan of Whiterose, rather than a solo agent trying to get her revenge on E Corp.

#### Seasons Comparison

The seasons differ in their representations of the hacker and the conglomerates. In season one, there is still a clear power versus resistance structure, the hackers are trying to hurt the conglomerate, bringing down their system by working in their protocol. Tyrell Wellick is an example of this, because he is only part of the hackers when he is fired from E Corp. In season two, this opposition is not that strict, and the situation has gotten more complex. The character who perfectly displays this complex interaction between all the different parties is Whiterose. Whiterose was just a hacker in season one, but is shown as a part of the rich society at the end of season one. His position becomes more complex as he is also part of the Chinese government. It is no longer just the hacker versus the conglomerate. There is a patchwork of different power nodes rather than a conglomerate with an abstract structure.

The notion of control and anonymity of the hacker is also different between the seasons. In season one, the hackers seem in control, and they seem anonymous. This all shatters near the end of season two. Darlene remains the same hacktivist, going on with the idea of breaking down the image of E Corp, but she finds out that they, as hackers, were less in control than they thought, since the hackers were followed by the FBI from the start. In season one, Elliot is resisting E Corp with Mr. Robot's help, while in season two Elliot tries to get rid of Mr. Robot. But Elliot loses all control to Mr. Robot, who organized a follow up to the hack that Elliot cannot stop, and he once again is left in the dark. The fsociety hackers seem lost in season two, they are without control, which sharply contrasts with the feeling of control they had in season one.

# 4. Comparison Watch Dogs, Watch Dogs 2, and Mr. Robot

Earlier in my thesis I asked the question: what is the function of the hacker in *Watch Dogs, Watch Dogs 2*, and *Mr. Robot*? This function is difficult to pinpoint, since control is abstract, and therefore difficult to represent and make tangible. The same applies to the activity of the hacker, which is abstract in form, and also difficult to represent and make tangible. The theoretical texts I used for the framework do specify what a society of control is, and what protocols are, but do not deal with the representation of hacking. So, I used *Watch Dogs, Watch Dogs 2*, and *Mr. Robot* to look at this representation and analyze what the function of the hacker is in the society of control.

# The Theme of Control

To analyze the function of the hacker, I had to specify what this abstract control was. I did this by using these questions as a guideline in my analysis: How does cybernetic control appear in these works? How does the hacker respond to this control? And for the video games an extra question was added: how does the player experience the figure of the hacker? In the video games the cybernetic control is sometimes visible as circles on the mini map which scan for the information of the suspect. The weaknesses of the power nodes of the society of control are shown in the video games, giving the hacker the location they need for their hack. In *Mr*. *Robot*, this cybernetic control is less visible. It is more represented by people telling things that they should not know. For example, when Angela tries to leak sensitive documents, the people whom she is giving these documents to know a lot about her. They know where she works and have information about her dad. This is the most tangible the control gets in *Mr*. *Robot*, mostly this control is implied.

In all these works the hacker resist power and their control, filling the position of the resistance in the society of control. All these works have a conglomerate they resist, in *Watch Dogs* it is Blume, which is the same conglomerate in *Watch Dogs* 2, and in *Mr. Robot* the conglomerate is E Corp. Even though in *Watch Dogs* 2 there are multiple corporations working with Blume, which are not completely innocent either. The difference between control in *Watch Dogs* in comparison to *Watch Dogs* 2 and *Mr. Robot* is that the hacker has a political motivation to resist the control of the conglomerate over their information in *Mr. Robot* and *Watch Dogs* 2.

The final question for the video game somewhat applies to the television-series as well, since the viewer is directly spoken to by Elliot. The question how does the player experience the figure of the hacker? The video game creates an opportunity for the gamer to play as a hacker. The video game gives the player some sort of control, as in the player can choose for the second chance that Aiden is capable of having, or they can make Aiden remain the violent hacker. In *Mr. Robot*, the viewer has no control, and can only accept what Elliot or Mr. Robot does. Elliot even gets angry with the viewer, telling him off for not telling Elliot all the viewer knows. The fact that Elliot directly confronts the viewer, sometimes gives the odd sensation of wondering that the viewer can do something, while immediately realizing that the viewer does not have any sense of control. The similarities in the works is that there is an illusion of control, but the video game does give the player some sort of control, rather than none like the television-series. This paradox of control of the video game hacker is remarkable, since the player pretends in the video game that they can work with the protocol and adjust it to their will, but in the end is still forced to work within the parameters of the game, not being able to do something the game does not allow.

## Hacker Types

In this section, I will argue how the representation of the hacker overlaps with the earlier established framework of the hacker. The hacker types of Wark, the Invisible Committee, and Anonymous are politically engaged. The first two of the three hacker types are anarchistic by nature. This anarchistic nature is seen in *Mr. Robot*'s hackers and in *Watch Dogs 2*'s hacker. These are hackers believe in bringing control back to the people, letting the public decide what to do with their information. In *Watch Dogs* and *Mr. Robot* the anarchistic violent hacker is the main character, or a part of the main character in Elliot's case. Mr. Robot and Aiden are anarchistic by nature, they are destructive characters that do not care about what happens if it helps them reach their goals. The only difference in these two works is that in the television-series *Mr. Robot* Elliot starts out as a non-violent hacker, and becomes Mr. Robot, a hacker that does not care if he is violent. In *Watch Dogs*, Aiden is a violent hacker that is consumed by grief, but transitions into a hacker that is not necessarily violent. This transition is based upon the choice of the player, but it is still a possibility.

In *Watch Dogs 2*, the hacker emphasize the importance of free information, since everyone should have the same access. This is in line with the idea of the hacker ideology of the Invisible Committee, who want information to be free. In *Mr. Robot*, the hackers want to release everyone from their debts, and give back control to the people. The idea is to get rid of the conglomerates, and for everything to reboot.

In the video games, the government uses the program of Blume called ctOS, and the hackers are resisting this program. In *Mr. Robot* it is more directly aimed at the conglomerate, while the *Watch Dogs* video games' hackers resist the authority of the government by rejecting ctOS, which is for example used by the police to track down criminals. This makes the video games slightly more anarchistic by nature, even though *Mr*.

*Robot* does have anarchistic hackers and does influence the society, their aim is not to resist the government, their goal is to take down E Corp.

The third hacker type of Anonymous is only visually represented. This hacker type does not have a clear goal, since their only goal is act if oppressed. But this oppression is not defined. However, their masks are very recognizable and this is what the video games and the television-series make use of. In *Watch Dogs*, a mask of a skull is shown whenever DedSec is trying to communicate with Aiden or the citizens. Their voices are altered, and their faces are unrecognizable since they are wearing the mask In *Watch Dogs 2*, this same theme is followed. In their case, they use the above mentioned skull mask and wear hoodies. This skull also appears in the graffiti made by DedSec, making it their symbol. In *Mr. Robot*, fsociety wears a mask of a fictitional film, in this film the bourgeoisie is being murdered by someone wearing a mask. Darlene gave Elliot the same mask, and at that time he transformed into Mr. Robot. This mask has a bigger impact in the television-series than in the video games, since it started the whole premise of the hack of E Corp's network. This mask is the mark of a new beginning, a different hacker and a hack that will change society.

#### Representation of Hacking

The television-series and the video games have a different approach to the representation of hacking. The video games make it quite fast, hacking camera's with the push of a button, while *Mr. Robot* actually takes hours to prepare hacks. The main difference between the television-series and video games seem to be not the hacker themselves, but the hacking. In the *Watch Dogs* video games, hacking is shown as a puzzle that the player has to solve, or a button they have to push. In *Watch Dogs 2*, gadgets are added such as a drone, which can get to areas the hacker cannot get to. The drone cannot physically hack computers,

but the Jumper is capable of physically hacking computers. This physical hack is shown as the Jumper opening the security computer, and plugging into the security computer. The hack is done within a few seconds. The puzzle solving hacking aligns with the idea that Galloway has of hacking. Since he sees it as solving puzzles, and thinking of possibilities within the program, trying to make your code fit into existing code. However, the director of *Mr. Robot* was disappointed in the portrayal of hackers, and that is why the representation of hacking is quite different in *Mr. Robot*. Unlike the video games, the core code is shown and the hack usually takes a little while. The characters talk about coding a virus in an hour, and that that was very short in their opinion. The viewer is confronted with the hackers working mostly in command of Windows, or other desktop distribution systems. The gadgets of *Mr. Robot* also work differently than the ones in the video games, the gadget that hacks cars actually needs quite some time to find the right frequency and such to be able to hack the car.

#### Conclusion

So, what is the function of the hacker in these works? *Watch Dogs* has a hacker that has a personal goal, who later turns into a watch dog that keeps in check the way of using the cybernetic control over the citizens of Chicago. Aiden does not want to be found, and resist being a dividual, but he does not completely resists the power, the government, or Blume. In *Watch Dogs 2*, hackers are activists trying to inform the people of ctOS, directly resisting Blume and the corporations that work together with Blume. The hackers of *Watch Dogs 2* resist the power, Blume and the government, since they feel that they are undermining the citizens. The vectoralist class struggle that Wark mentions can be seen in *Watch Dogs 2*, since the corporations being in control of the vectors of communications are the corporations that the hackers are rejecting, since they are abusing their power according to the hackers. In *Mr*. *Robot*, hackers are resisting the conglomerate E Corp, that is in control of everyone's money. The hackers resist the power of E Corp, since they want to free the citizens of their debts. The hackers of *Mr*. *Robot* are the resistance to the conglomerate power, and they have an anarchistic goal, namely resetting everything and giving people back their control. However, the television-series shows that the playing field is not this clearly divided. The conglomerate, the hacker, and the government are not so clearly separate as seen through the character of Whiterose. The television-series shows that the structure of the power and resistance is not that clear cut in the real world. The hacker has a complex position, seeing as the power by itself is already a patchwork, the resistance cannot be in one domain, it must also be fragmented.

#### Works Cited

- Anonymous. "Anonymous Manifesto Anonymous Medium." *Medium*, 13 April 2017, <u>https://medium.com/your-anon-central/anonymous-manifesto-bded3f87defc</u>. Accessed 20 June 2017.
- Berry, David M, and Alexander R. Galloway. "A Network is a Network is a Network: Reflections on the Computational and the Societies of Control." *Theory, Culture & Society*, Vol. 33, no. 4, 2016, pp. 151-72.
- Bogard, William. "Deleuze and Machines: A Politics of Technology?" *Deleuze and New Technology*. Ed. Mark Poster and David Savat. Edinburgh: Edinburgh UP, 2009. pp. 15-31.
- Deleuze, Gilles. "Postscript on the Societies of Control." October, vol. 59, 1992, pp. 3-7.
- Foucault, Michel. Discipline and Punish: The Birth of the Prison. New York: Vintage, 1995.
- Galloway, Alexander R. "Black Box, Black Bloc." 12 April 2010, New School, New York City. Lecture.

Galloway, Alexander R. "Protocol." *Theory, Culture & Society*, vol. 23, no. 2-3, 2006, pp. 317-20.

- Galloway, Alexander R. Protocol. The MIT Press, 2004.
- Galloway, Alexander R., and Eugene Thacker. *The Exploit: a Theory of Networks*. Vol. 21, Minneapolis, MN, University of Minnesota Press, 2007.
- Invisible Committee. "Fuck Off, Google." *To Our Friends*. Translated by Robert Hurley, Semiotext(e), 2015, n.p. [1-8].
- Schrock, Andrew R. "Civic hacking as data activism and advocacy: A history from publicity to open government data." *New Media & Society*, vol. 18, no. 4, 2016, pp. 581-99.

- Thompson, Paul B. "Morality and the myth of scarcity." *The Ethics of Aid and Trade: U.S. Food Policy, Foreign Competition, and the Social Contract*, Cambridge UP, 2010, pp. 159-182.
- Wark, McKenzie. "Hackers." *Theory, Culture & Society*, vol. 23, no. 2-3, 2006, pp. 320-22. Wark, McKenzie. *A Hacker's Manifesto*. Harvard University Press, 2004.